

### Remarks

The Office Action dated March 28, 2005 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-17 and 19-29 are now pending in this application. Claims 1-29 stand rejected. Claim 18 has been canceled.

The objection to drawings is respectfully traversed. Applicants respectfully submit that all claimed features are shown in the figures. Specifically, with respect to the “pair of photon detectors using a SPECT modality”, the specification recites:

imaging system 200 includes a pair of dual x-ray/gamma ray detectors 202 and 204. In the exemplary embodiment, dual x-ray/gamma ray detectors 202 and 204 are configured to be interchangeable with dual x-ray/gamma ray detector 16 (shown in Figure 1) by using similar connecting hardware through which dual x-ray/gamma ray detectors 202 and 204 and dual x-ray/gamma ray detector 16 are coupled to C-arm 14.

Specification, Page 6, lines 9-13. The specification also recites at Page 3, lines 23-28, “[d]ual x-ray/gamma ray detector 16 may be included in a plurality of imaging assembly modalities and/or multi-modality imaging assemblies, for example, any combination of a SPECT imaging assembly, a PET imaging assembly, a CT imaging assembly, a Static x-ray imaging assembly, and a Dynamic (Fluoroscopy) x-ray imaging assembly.” Accordingly, detectors 202 and 204 are illustrated in Figure 2 and are described in the specification as dual x-ray/gamma ray detectors configured to be interchangeable with dual x-ray/gamma ray detector 16 shown in Figure 1, which may be included in a plurality of imaging assembly modalities and/or multi-modality imaging assemblies, for example, any combination of a SPECT imaging assembly, a PET imaging assembly, a CT imaging assembly, a Static x-ray imaging assembly, and a Dynamic (Fluoroscopy) x-ray imaging assembly. Applicants respectfully submit that one skilled in the art, after reading the specification in light of the figures, would understand the claimed feature is shown in the figures.

Moreover, with respect to the assertion in the Office Action that the “pair of detectors

inclined at an angle” is not shown in the drawings, Figure 2 illustrates detectors 202 and 204 inclined at an angle with respect to each other, for example, about ninety degrees. The specification describes at Page, 6, lines 18-21 that:

detectors 202 and 204 are arranged such that angle 210 is substantially 90 degrees with respect to each other. In an alternative embodiment, detectors 202 and 204 may be arranged at a plurality of selectable values of angle 210.

Applicants respectfully submit that one skilled in the art, after reading the specification in light of the figures, would understand the claimed feature is shown in the figures.

For at least the reasons set forth above, Applicants respectfully request that the objection to the drawings be withdrawn.

The objection to Claims 6 and 18 is respectfully traversed. Specifically Claim 6 has been amended to depend from Claim 4 and Claim 18 has been canceled.

For at least the reasons set forth above, Applicants respectfully request that the objection to Claims 6 and 18 be withdrawn.

The rejection of Claims 1-7, 11, 12, 14-18, and, 24-26 under 35 U.S.C. § 103(a) as being unpatentable over Nafstadius (U.S. Patent No. 6,865,254) in view of Chao (U.S. Patent 6,052,433) is respectfully traversed.

Nafstadius describes a radiation machine incorporating a diagnostic imaging system including a treatment and diagnostic radiation source and detector. The detector is adapted to detect the low energy radiation (photons) of the cone-beam CT system and sends a signal to the processing means based on the detected irradiation. The processing means then computes an 3-dimensional image of the patient, preferably the portion thereof including the target volume, which may be visualized, compared to a reference image or stored. The detector is preferably also adapted to detect the high-energy radiation from the treatment radiation source. With this high-energy radiation, a rather poor contrast portal image is determined, which may be used for positioning purposes. Notably, Nafstadius does not describe or suggest imaging a patient utilizing a first imaging modality and imaging a patient utilizing a

second imaging modality, but rather merely describes imaging a patient using different energy photons using only one imaging modality.

Chao describes performing dual-energy x-ray imaging using two-dimensional detectors. The apparatus includes, an x-ray source, a front two-dimensional x-ray detector, a beam selector, and a rear two-dimensional x-ray detector. The subject is located between the x-ray source and front detector. The x-ray source (14) emits two consecutive pulses, a high-energy pulse at an average energy level  $H$  followed by a low-energy pulse at an average energy level  $L$ . A pair of image data for the rear detector assembly is acquired at the higher energy level  $H$  and the lower energy level  $L$  of x-rays. Notably, Chao describes using two detectors to perform imaging in only one modality wherein an x-ray source emits x-rays at two different energy levels. The x-rays are used by the two detectors to generate two dimensional images of the subject.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Nafstadius according to the teachings of Chao. More specifically, it is respectfully submitted that a prima facie case of obviousness has not been established. As explained by the Federal Circuit, “to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.” In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

Moreover, the Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that “[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, “it is impermissible . . . to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” In re Wesslau, 147

USPQ 391, 393 (CCPA 1965). Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the cited art, nor any reasonable expectation of success has been shown.

Although Applicants agree with the assessment in the Office Action that Nafstadius does not describe a CZT detector, Applicants respectfully disagree with the assertion that Nafstadius describes imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality. As is known in the art and is described in the originally filed specification, different modalities, such as, for example, Positron Emission Tomography (PET), Single Positron emission tomography (SPECT), Computed Tomography (CT), Static X-Ray imaging, and Dynamic (Fluoroscopy) X-Ray imaging are used during different portions of a scan to image a patient. Modality does not refer merely to using two different energy level x-rays to perform the same scan. Applicants respectfully submit that performing a CT scan using x-rays having energy levels that are different with respect to each other can not fairly be equated with imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality. As such, the combination of Nafstadius and Chao collectively fails to teach each of the elements of the claimed invention. For at least the reasons set forth above, Claims 1-7, 11, 12, 14-18, and, 24-26 are submitted to be patentable over Nafstadius in view of Chao.

Moreover, Applicants submit that there is no teaching nor suggestion in the cited art for the claimed combination, and as such, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Specifically, Nafstadius is cited for its alleged teaching of the claimed invention except for a CZT detector, and Chao is cited for its teaching of a CZT detector. Of course, such a combination, based on hindsight reconstruction, is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 3-5 be withdrawn.

Furthermore, Applicants respectfully submit that no motivation for the combination can be found within Nafstadius and Chao, as Nafstadius and Chao teach away from each

other. Specifically, Nafstadius describe a radiation treatment machine that includes an imaging system using a single detector for creating three-dimensional images of the patient, and in contrast, Chao describe an imaging system that uses two detectors to generate two-dimensional images of a patient. Both detectors are required to acquired the data necessary to perform image decomposition in accordance with the described method. Accordingly, Nafstadius describes generating three dimensional images using two x-ray sources and a single detector and Chao describes generating two dimensional images using a single x-ray source and two detectors.

If art “teaches away” from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. More specifically, Applicants respectfully submit that Nafstadius teaches away from Chao, and as such, there is no suggestion or motivation to combine Nafstadius with Chao.

Moreover, no combination of Nafstadius and Chao, describes or suggests the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 1 recites a method of examining a patient wherein the method includes “aligning a patient table in an opening of a gantry that includes a CZT photon detector and an x-ray source...imaging a patient utilizing a first imaging modality during a first portion of a scan using the CZT detector...imaging a patient utilizing a second imaging modality during a second portion of the scan using the CZT detector wherein the second imaging modality is different than the first imaging modality.”

Neither Nafstadius nor Chao, considered alone or in combination, describe or suggest a method of imaging a patient that includes imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality wherein the second imaging modality is different than the first imaging modality. Rather, in contrast to the present invention, Nafstadius describes imaging a patient using x-rays of two different energy levels from two separate x-ray sources and a single detector to generate three dimensional images and Chao describes imaging a patient using x-rays of two different energy levels from a single x-ray source and two detectors to generate three dimensional images, but neither

Nafstadius nor Chao, considered alone or in combination, describe or suggest imaging a patient that includes imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality wherein the second imaging modality is different than the first imaging modality. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Nafstadius in view of Chao.

Claims 2-7, 11, and 12 depend from independent Claim 1. When the recitations of Claims 2-7, 11, and 12 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-7, 11, and 12 likewise are patentable over Nafstadius in view of Chao.

Claim 14 recites an imaging system including “a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions.”

Neither Nafstadius nor Chao, considered alone or in combination, describe or suggest an imaging system including a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions. Rather, in contrast to the present invention, Nafstadius describes imaging a patient using x-rays of two different energy levels from two separate x-ray sources and a single detector to generate three dimensional images and Chao describes imaging a patient using x-rays of two different energy levels from a single x-ray source and two detectors to generate three dimensional images, but neither Nafstadius nor Chao, considered alone or in combination, describe or suggest an imaging system including a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions. For at least the reasons set forth above, Claim 14 is submitted to be patentable over Nafstadius in view of Chao.

Claims 15-18 and 24-26 depend from independent Claim 14. When the recitations of Claims 15-18 and 24-26 are considered in combination with the recitations of Claim 14,

Applicants submit that dependent Claims 15-18 and 24-26 likewise are patentable over Nafstadius in view of Chao.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-7, 11, 12, 14-18, and, 24-26 be withdrawn.

The rejection of Claims 8-10 and 19-23 under 35 U.S.C. § 103(a) as being unpatentable over Nafstadius (U.S. Patent No. 6,865,254) in view of Chao (U.S. Patent 6,052,433) and further in view of Natterer et al., "Natterer" (U.S. Patent No. 6,631,285) is respectfully traversed.

Nafstadius and Chao are described above. Natterer describes a nuclear medical imaging apparatus that includes a radiation detector (12) that is equipped with a slat collimator (14) including a plurality of spaced apart slats (114) separating individual detecting elements of an essentially linear array of detecting elements (116). The slat collimator produces planar collimation and results in projection data which is weighted inversely with distance in the projection direction. An image reconstruction processor (34) converts the projection data obtained by the detector (12) into an image, including correction for the inverse distance weighting.

Preliminarily, Applicants traverse the assertion in the Office Action that "Natterer discloses an x-ray imaging apparatus." Applicants respectfully submit that Natterer only describe a gamma camera that includes a slat collimator and an associated method of reconstructing images using the slat-collimated gamma camera. Natterer states the apparatus and method may be used in SPECT and PET imaging.

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Nafstadius, Chao, nor Natterer considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Nafstadius with Chao and Natterer, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches

or suggests to combine the disclosures, other than Applicant's own teaching. Rather, only the conclusory statement that "[i]t would have been obvious to one with ordinary skill in the art to introduce radiopharmaceuticals into the patient to perform nuclear imaging because it allows for better imaging of organs such that the images are produced that are clear enough to evaluate" suggests combining the disclosures.

Although Applicants agree with the assessment in the Office Action that Nafstadius in view of Chao does not describe or suggest a system that can be used for nuclear imaging, Applicants respectfully disagree with the assertion in the Office Action that Natterer describes or suggests an x-ray imaging apparatus at all. None of Nafstadius, Chao, or Natterer describe or suggest a system that is capable of multi-modality imaging. Specifically, Nafstadius, Chao only describe systems that use x-rays having different energy levels, and Natterer only describes a gamma camera. Applicants respectfully submit that combining three references that each only describe one modality can not fairly be equated with a system that images a patient utilizing a first imaging modality and images a patient utilizing a second imaging modality wherein the second imaging modality is different than the first imaging modality. As such, the combination of Nafstadius, Chao, and Natterer collectively fails to teach each all of the elements of the claimed invention. For at least the reasons set forth above, Claims 18-20 and 29-31 are submitted to be patentable over Nafstadius in view of Chao and further in view of Natterer.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is



impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Nafstadius according to the teachings of Chao and Natterer. More specifically, it is respectfully submitted that a prima facie case of obviousness has not been established. As explained by the Federal Circuit, “to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.” In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

Moreover, the Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that “[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, “it is impermissible...to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” In re Wesslau, 147 USPQ 391, 393 (CCPA 1965).

Moreover, no combination of Nafstadius Chao and Natterer, describes or suggests the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 1 recites a method of examining a patient wherein the method includes “aligning a patient table in an opening of a gantry that includes a CZT photon detector and an x-ray source...imaging a patient utilizing a first imaging modality during a first portion of a scan using the CZT detector...imaging a patient utilizing a second imaging modality during a second portion of the scan using the

CZT detector wherein the second imaging modality is different than the first imaging modality.”

None of Nafstadius, Chao, nor Natterer, considered alone or in combination, describe or suggest a method of imaging a patient that includes imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality wherein the second imaging modality is different than the first imaging modality. Rather, in contrast to the present invention, Nafstadius describes imaging a patient using x-rays of two different energy levels from two separate x-ray sources and a single detector to generate three dimensional images and Chao describes imaging a patient using x-rays of two different energy levels from a single x-ray source and two detectors to generate three dimensional images, and Natterer describes a nuclear medical imaging apparatus, but none of Nafstadius, Chao, nor Natterer, considered alone or in combination, describe or suggest imaging a patient that includes imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality wherein the second imaging modality is different than the first imaging modality. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Nafstadius in view of Chao and further in view of Natterer.

Claims 8-10 depend from independent Claim 1. When the recitations of Claims 8-10 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 8-10 likewise are patentable over Nafstadius in view of Chao and further in view of Natterer.

Claim 14 recites an imaging system including “a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions.”

None of Nafstadius, Chao, nor Natterer, considered alone or in combination, describe or suggest an imaging system including a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions. Rather, in contrast to the present invention, Nafstadius describes imaging a patient using x-rays of two different energy levels

from two separate x-ray sources and a single detector to generate three dimensional images and Chao describes imaging a patient using x-rays of two different energy levels from a single x-ray source and two detectors to generate three dimensional images and Natterer describe a nuclear medicine imaging system, but none of Nafstadius, Chao, nor Natterer, considered alone or in combination, describe or suggest an imaging system including a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions. For at least the reasons set forth above, Claim 14 is submitted to be patentable over Nafstadius in view of Chao and further in view of Natterer.

Claims 19-23 depend from independent Claim 14. When the recitations of Claims 19-23 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 19-23 likewise are patentable over Nafstadius in view of Chao and further in view of Natterer.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 8-10 and 19-23 be withdrawn.

The rejection of Claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Nafstadius (U.S. Patent No. 6,865,254) in view of Chao (U.S. Patent 6,052,433) and further in view of Flohr et al., "Flohr" (U.S. Patent No. 6,504,893) is respectfully traversed.

Nafstadius and Chao are described above. Flohr describes a method for examining a body region of an examination subject executing a periodic motion with a CT apparatus having a multi-line detector system in spiral mode, the X-ray source is activated and deactivated for the emission of X-rays substantially synchronously with the periodic motion so that the X-ray source is activated only during a phase of the periodic motion to be imaged with the CT apparatus.

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Nafstadius, Chao, nor Flohr considered alone or in combination, describe or suggest the claimed combination.

Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Nafstadius with Chao and Flohr, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicant's own teaching. Rather, only the conclusory statement that "[i]t would have been obvious to one with ordinary skill in the art at the time the invention was made to include a triggering mechanism within the system disclosed in Nafstadius and Chao because it allows for a clearer image of a moving target" suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Nafstadius according to the teachings of Chao and Flohr. More specifically, it is respectfully submitted that a prima facie case of obviousness has not been established. As explained by the Federal Circuit, "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be

some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.” In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

Moreover, the Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that “[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, “it is impermissible . . . to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” In re Wesslau, 147 USPQ 391, 393 (CCPA 1965).

Moreover, no combination of Nafstadius Chao and Flohr, describes or suggests the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 1 recites a method of examining a patient wherein the method includes “aligning a patient table in an opening of a gantry that includes a CZT photon detector and an x-ray source...imaging a patient utilizing a first imaging modality during a first portion of a scan using the CZT detector...imaging a patient utilizing a second imaging modality during a second portion of the scan using the CZT detector wherein the second imaging modality is different than the first imaging modality.”

None of Nafstadius, Chao, nor Flohr, considered alone or in combination, describe or suggest a method of imaging a patient that includes imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality wherein the second imaging modality is different than the first imaging modality. Rather, in contrast to the present invention, Nafstadius describes imaging a patient using x-rays of two different energy levels from two separate x-ray sources and a single detector to generate three dimensional images, Chao describes imaging a patient using x-rays of two different energy levels from a single x-ray source and two detectors to generate three dimensional images, and Flohr

describes a CT apparatus having an X-ray source that is activated and deactivated for the emission of X-rays substantially synchronously with periodic motion in an examination subject, but none of Nafstadius, Chao, nor Flohr, considered alone or in combination, describe or suggest imaging a patient that includes imaging a patient utilizing a first imaging modality and imaging a patient utilizing a second imaging modality wherein the second imaging modality is different than the first imaging modality. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Nafstadius in view of Chao and further in view of Flohr.

Claim 13 depends from independent Claim 1. When the recitations of Claim 13 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 13 likewise is patentable over Nafstadius in view of Chao and further in view of Flohr.

The rejection of Claims 27-29 under 35 U.S.C. § 103(a) as being unpatentable over Nafstadius (U.S. Patent No. 6,865,254) in view of Chao (U.S. Patent 6,052,433) and further in view of Ivan et al., "Ivan" (U.S. Patent No. 6,364,526) is respectfully traversed.

Nafstadius and Chao are described above. Ivan describes a fluoroscopy system having a C-arm that can be a stand-alone device which is mounted near a gantry. The C-arm (90) is suspended from a ceiling via a mounting structure such as an overhead track system G including first rails (92), and transverse rails (94) which are movable along the first rails (92). A trolley (96) is movably secured to the transverse rails 94 in directions transverse to the rails (92).

Applicant respectfully submits that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Nafstadius, Chao, nor Ivan considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Nafstadius with Chao and Ivan, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicant's own teaching. Rather, only the conclusory

statement that “[i]t would have been obvious to one with ordinary skill in the art at the time the invention was made to include a rail system within the imaging system of Nafstadius and Chao because it increases the range of movement on the entire machine” suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants’ disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant’s disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Nafstadius according to the teachings of Chao and Ivan. More specifically, it is respectfully submitted that a prima facie case of obviousness has not been established. As explained by the Federal Circuit, “to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.” In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

Moreover, the Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that “[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, “it is impermissible...to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” In re Wesslau, 147 USPQ 391, 393 (CCPA 1965).

Moreover, no combination of Nafstadius Chao and Ivan, describes or suggests the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 14 recites an imaging system including “a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions.”

None of Nafstadius, Chao, nor Ivan, considered alone or in combination, describe or suggest an imaging system including a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions. Rather, in contrast to the present invention, Nafstadius describes imaging a patient using x-rays of two different energy levels from two separate x-ray sources and a single detector to generate three dimensional images, Chao describes imaging a patient using x-rays of two different energy levels from a single x-ray source and two detectors to generate three dimensional images and Ivan describe a system having a C-arm that is suspended from a ceiling via a mounting structure such as an overhead track system, but none of Nafstadius, Chao, nor Ivan, considered alone or in combination, describe or suggest an imaging system including a gantry unit having an x-ray source for generating x-rays and a CZT detector configured to detect emission gamma photons and transmission x-ray photons, the C-arm moving the x-ray source and detector along an image acquisition path between at least first and second imaging positions. For at least the reasons



set forth above, Claim 14 is submitted to be patentable over Nafstadius in view of Chao and further in view of Ivan.

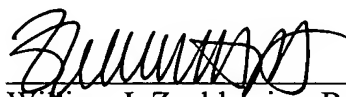
Claims 27-29 depend from independent Claim 14. When the recitations of Claims 27-29 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 27-29 likewise are patentable over Nafstadius in view of Chao and further in view of Ivan.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 27-29 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claim 27-29 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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